



DELAWARE'S

4th Annual Hazardous Material Conference

April 1 & 2, 2011

Session Descriptions and Presenter Information

1. **Gas Station/ Fuel Tanker Emergencies:** This session will include reviews of gasoline and fuel incidents.

Presenter: Bill Kelly is a long term employee of Sunoco, Inc. Mr. Kelly has held many positions throughout his career in the Eagle Point, Marcus Hook and Philadelphia refineries. He is currently the Supervisor of Fire & Emergency Response and Fire Chief. He served as the Fire Chief of the Claymont Volunteer Fire Department from 1981 to 1997. Mr. Kelly has numerous certifications and professional affiliations. He is also a certified instructor with the Delaware State Fire School.

2. **Chemical Suicide:** Missouri Emergency Response Commission in cooperation with New York State Office of Fire Prevention and Control has developed Chemical Suicide: Information for the Emergency Responder. Although you may not have heard of Chemical Suicide it is happening across the U.S. and has already happened in Missouri. This method of suicide has grown rapidly in Japan since 2007 and experts agree that it will continue to grow here in the U.S. over the next several years. This form of suicide creates some very dangerous hazards for the emergency responder due to the highly toxic gasses that are created. This classroom based course will provide background on the history of Chemical Suicide in Japan and the US. It will provide a detailed look at the chemicals most commonly used during Chemical Suicide, their effect on the victim and precautions the responder should take to protect themselves during the response. This course will also provide several case studies of Chemical Suicides within the United States. And finally, we will discuss basic emergency response practices that you as a responder should take into consideration when faced with a Chemical Suicide response.

Presenter: Jacob Oreshan, III is a Deputy Chief with the New York State Office of Fire Prevention and Control, Hazardous Materials / Homeland Security Bureau. He is a New York State Certified Firefighter, Fire Officer, Fire Service Instructor, Code Officer, Fire Investigator and Hazardous Materials Specialist, as well as a National Certified Firefighter and Hazardous Materials Responder. Jake has been a firefighter for 23 years, the last 7 with New York State Fire. Deputy Chief Oreshan began his professional career in 1990, working as a Critical Care Technician at a Level 1 Trauma Center. In 1992, while still working as a CCT, he began working at as a Communications Specialist for the Colonie Police Department, Colonie, NY. In January 2002, Jake accepted a job as the Director of Communications for the City of Cohoes Police Department, Cohoes, NY.

Deputy Chief has developed several specialized courses in the field of Hazardous Materials & Homeland Security, including First Receiver Decontamination; Terrorism, Bombs and Schools; and Chemical Suicides: Information for the First Responder.

Deputy Chief Oreshan most recently sat on the National HazMat Fusion Center's Chemical Assisted Suicide Work Group and helped to write the national guidelines for response to these emergencies.

3. **Overview of Chemical Warfare Agents from a Homeland Security Perspective:** This presentation provides an "all hazards" jump-start approach to treating the unknown by understanding the patient's symptoms when exposed to vesicants, cyanides, pulmonary and nerve agents.
Presenter: Dr. Charles Hurst, Colonel (ret.), US Army Medical Research Institute of Chemical Defense.
4. **IED Awareness - Homemade Explosives (HME's):** This session will discuss local incidents involving Homemade Explosives or (HME's) Precursors / Indicators of Homemade Explosives. What to do if you suspect HME's or precursors and what not to do. How to contact your local bomb squad.
Presenter: Sgt. Chris Ennis has been a member of the Delaware State Police for more than twenty years. Instructor for International Association of Chiefs of Police, Leadership in Police Organizations for DSP. Member of the DSP-EOD Team for 19 years. Delaware State Police EOD Team Commander since June 2003. Delaware Chapter Director of the International Association of Bomb Technicians and Investigators. Recognized by the FBI as a subject matter expert for Bomb Squad Operations and in 2008. Selected to help write the National Response Plan for Bomb Squad Responses to Large Vehicle Bomb IED's and Person Borne IED's. In 2008 he was identified as a SME by the National Bomb Squad Commanders Advisory Board and asked to help write a manufacturing standard for all future bomb suits to be worn by all U.S. Bomb Technicians.
5. **HazMat Scene Preservation:** The capabilities and limitations of various techniques commonly deployed in the hot zone for the detection of suspect chemical and biological materials will be discussed. The use of these techniques as they relate to crime scene preservation and hazardous evidence collection will also be discussed.
Presenter: Dr. Sheri A. Bettis is a Supervisory Chemist with the Federal Bureau of Investigation's Hazardous Materials Science Response Unit (HMSRU). Dr. Bettis has supported numerous crime scene searches and WMD incident responses requiring Level A, B, or C down-range operations. Dr. Bettis received her B.S. in Chemistry from Randolph-Macon College in Ashland, Virginia in 1998. Prior to joining the FBI in 2004, Dr. Bettis received her Ph.D. in Chemistry from Georgetown University in Washington, DC.
6. **Responding to Hydrofluoric (HF) Acid Emergencies:** This session will cover HF characteristics and review the unique concerns facing responders.
Presenter: Jeff Lease, Honeywell Corporation.
7. **Clandestine Drug Labs:** This session is designed to identify hazards associated with clandestine drug laboratories and equip individuals with the knowledge to identify at least three indicators of a clandestine drug laboratory. They will also be able to recognize two different types of clandestine drug laboratories.
Presenter: Rebecca Patrick is with the Pennsylvania State Police where she is a Forensic Scientist 2 at the Bureau of Forensic Services, Bethlehem Regional Laboratory. She has a Bachelor of Science Degree in Chemistry from Bucknell University, Lewisburg, PA.
8. **RAE Systems Presentation:** This session will discuss the emerging trend of wireless monitoring capabilities that are now becoming more readily available for everyday operations in fire service/HazMat, industrial, environmental and military scenarios.

"Hosted by the 31st Civil Support Team at the Smyrna Readiness Center"

Presenter: G. Robert Ladzinski is currently the Regional Sales Manager of RAE Systems. He has responsibility of managing sales, providing technical assistance and training in DE, NJ, NYC/LI and E PA. In addition he manages the NYS HIRE (Hazardous Incident Response Equipment) Contract which is currently in use in 18 other states. DE signed a participation addendum for all state, county and municipal entities to use this contract in the summer of 2010. He graduated from Villanova University with a B. S. in General Science and a Concentration in Biochemistry. He has over 25 years experience in the health and safety industry working in sales and marketing for both manufactures and distributors. He has most recently presented for the Lehigh Valley Chapter of the AIHA (American Industrial Hygiene Association; April 2010) and MAREP (Mid Atlantic Region Environmental Professionals; December 2010). In addition to his general sales and HIRE Contract responsibilities he has a keen interest in developing product solutions for emerging markets. His interest in CO detection for the EMS market as well as HCN monitoring in overhaul applications are beginning to get national attention.

- 9. Dealing with Heat Stress:** Exertional heat stress is a common, but often unrecognized, hazard for public safety personnel. Resulting from the combination of workload, environment and PPE, exertional heat stress often places HazMat technicians and firefighters in jeopardy. With subtle signs and symptoms, exertional heat stress differs from heat conditions typically treated by EMS personnel. This session will show the factors that increase a responder's risk for exertional heat illness. Additionally, it will show examples of exertional heat stress cases and provide information on how to identify and treat exertional heat stress before the responder's life is in danger.

Presenter: David Hostler, PhD, CSCS, is an associate professor of emergency medicine at the University of Pittsburgh. He earned his PhD in physiology from Ohio University. He is a founding faculty member and the director of the Emergency Responder Human Performance Lab where he studies fire, police, HazMat, and EMS providers to develop interventions and protocols to improve the health and safety of the nation's first responders. Dr Hostler is the principal investigator of the Enhanced Firefighter Rehab Trial (EFFoRT) and the SHIELD Trial examining the role of statin drugs in firefighters. He has 23 years experience as a firefighter/paramedic and is a technical specialist with the Allegheny County HazMat Medical Response Team.

- 10. Radiological EMS Response:** This session will cover medical response to accidents involving radiation and other hazardous materials.

Presenter: Tony Serratore has twenty-four years of experience in Emergency Medicine, Nuclear Power Plant Operations, Emergency Preparedness, Law Enforcement, Hazardous Materials Response, and Training. He is an NFPA Qualified EMS/HazMat Level II Responder, HazMat Specialist, and HazMat Instructor. Mr. Serratore is a Critical Care Certified, Registered Nurse. He was named the Virtua Health West Jersey Voorhees "Emergency Department Nurse of the Year" for 1999. He was also awarded Virtua Health's "Superstar Award" for Co development, training, and implementation of response protocols for Nuclear, Biological, and Chemical Emergencies in 2002, and again in 2006 for Clinical excellence. Mr. Serratore serves on a National Emergency Medical Response Team for Hazardous Materials and Radiation Accidents, and has participated in the mitigation of several accidents. He was a member of the Three Mile Island Accident Mitigation and Recovery Team. He has provided consultation to develop National Patient Decontamination Protocols. As president of HAZ/MED CONSULTANTS, Mr. Serratore is responsible for the coordination, implementation, and training of pre-hospital and hospital

personnel in the management of HazMat and radiation accident victims. He currently works full-time for Walt Disney World Occupational Health, Guest First Aid, and Hazardous Material Response.

11. Bio Agents 101: Bio-warfare agents, traditional, non-traditional and emerging threats.

Presenter: Mr. Richard N. Arestad is currently a Training Coordinator for the USAMRIID Field Identification of Biological Warfare Agents (FIBWA) Course. He received a Bachelor of Science, Health Science, TUI University, CA and an Associate of Applied Science from Excelsior College, NY. He has also completed the US Army Field Identification of Bio-Warfare Agents Course, Medical Laboratory Technician Advanced Course and the Basic Medical Laboratory Course.

12. Decision Making Part 1 & 2: Emergency response personnel must make decisions when responding to emergencies involving hazardous materials. This class will show participants how to take their experience and make reasonable decisions at emergencies. The interrelationship of the container, its contents, and the environment will be addressed in discussing the task of understanding the problem in an emergency. Participants will gain skills in predicting behavior, estimating outcomes and planning a response to emergencies involving hazardous materials.

Presenter: Mr. Charles J. Wright, Manager (retired) of Hazardous Materials Training for Union Pacific Railroad from 1979 through 2009, Secretary of the NFPA's Technical Committee on Hazardous Materials Response Personnel, instructor in the Fire Protection Technology Program at the University of Nebraska, and 2009 recipient of the International Association of Fire Chiefs Hazardous Materials Committee's John Eversole Lifetime Achievement Award.

13. Dover Air Force HazMat: This session will describe how the fire department, readiness section, and emergency management conduct joint operations locally and on a federal level. It will also identify the capabilities that the interoperability of these groups can provide in the civilian sector.

Presenters: TSgt. Michael Doyle, DAFB Emergency Manager; Harvey Velott, MSgt. (Retired), former DAFB Emergency Manager; John Melvin, DAFB HazMat Team Chief.

14. Refinery Incidents: This session will include an overview of refinery incidents.

Presenter: Bill Kelly, see #1.

15. ICS for HazMat/EMS: Incident command/management is a concept given considerable attention within the Emergency Services. HazMat and Emergency Medical Services (EMS) personnel may have varied experience and educational backgrounds regarding the subject matter. Many emergency medical and fire service personnel believe that they have a command system, when actually what they have is a departmental chain of command. This course should help students recognize the importance of an effective Incident Command System as well as understanding the components of the system as they relate to HazMat and EMS incidents.

Presenter: John Clawson retired from the DuPont Company with over 38 years service in December 2004. During his tenure with DuPont he implemented the DuPont CAER Car Program in 1989 and he also led the HazMat team at Chambers Works for 6 years. Mr. Clawson is a Level II instructor at the Delaware State Fire School and a Proboard certified HazMat Specialist, a Volunteer Firefighter, and a Decon team member. He helped

to establish the New Castle County Industrial Hazardous Material Response Alliance (NCCIHMRRA) Team.

16. Radiological EMS Response: See #10

17. HazMat Crime Scene Preservation: See #5

18. Rail Car HazMat Case Studies: The program will discuss three derailments. The first was a car of Anhydrous Hydrogen Fluoride that had valves sheared off and went into a river. The second derailment involved multiple cars of Denatured Alcohol with extensive loss of product and fires. The third derailment involved Sodium Hydroxide Solution and Chlorine.

Presenter: Bill Oerty has worked for Norfolk Southern (NS) as a Hazardous Material Compliance Officer for 6 years, prior to that he worked for Association of American Railroads/Bureau of Explosives for 17 ½ years as HM Inspector with duties identical to his NS responsibilities. He inspects shipments on rail to make sure that the package, marking labeling, placarding, and paperwork are in compliance with HM regulations. He conducts training for railroad employees, shippers, and emergency responders about regulations, tank cars, and emergency response. He also responds to HM emergencies and does tank car damage assessment, field transfers, and technical advice.

19. IED Awareness - Homemade Explosives (HME's): See #4

20. Chemical Suicide: See #2

21. Bio Agents 101: See #11

22. Overview of Chem. Warfare Agents from a Homeland Security Perspective: See #3